REMARKS/ARGUMENTS

This is in response to the Advisory Action mailed April 26, 2005. A Request for Continued Examination (RCE) is being filed herewith.

Claims 1-23 and 27-29 are all the claims pending in the application.

The final Office Action mailed February 8, 2005, contains the following rejections at Section Nos. 6 and 8:

> Claims 1-7, 10-21, and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,965,123 ("US '123"); and
>
> Claims 8-9, 22-23, and 28-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US '123 in view of U.S. Patent 5,888,640 ("US '640").

Applicants respectfully traverse the rejections. The Declaration of Ms. Squier filed November 22, 2004, in combination with an excerpt from *The Manual of Labelling Technology* being submitted herewith, renders the presently claimed invention patentable over the rejections based on US '123 and US '123 in view of US '640.

Ms. Squier's Declaration filed November 22, 2004, is evidence from one of ordinary skill in the art as to the proper construction of the term "cold glue adhesive" in the present claims.

Similar to the distinction made between "cold glue adhesive" and "cold seal adhesive" in the Declaration filed May 25, 2004, the Declaration filed November 22, 2004, leads to the conclusion that the term "cold glue adhesive" is understood by those of ordinary skill in the art as referring to a class of materials distinct from and not including "pressure-sensitive adhesives." In particular, the different functional applications of cold glue adhesives and pressure-sensitive adhesives necessitate that cold glue adhesives and pressure-sensitive adhesives have different formulations which result in cold glue adhesives having different inherent properties from pressure-sensitive adhesives.

Because the terms "cold glue adhesive" and "pressure-sensitive adhesive" refer to different classes of materials, the term "cold glue adhesive" in the present claims does not encompass the pressure-sensitive adhesives disclosed in US '123. Accordingly, US '123 does not disclose (anticipate) the claimed invention.

Furthermore, it would not have been obvious to modify US '123, either by reference to itself or US '640, and arrive at the claimed invention.

There must be some motivation or suggestion to make the claimed invention in light of the prior art teachings. The mere possibility that the prior art may be modified so as to arrive at the claimed invention does not render obvious the invention unless the prior art suggested the desirability of the modification. The suggestion to modify must be "clear and particular." In re Sang Su Lee, 2002 U.S. App. LEXIS 855 (Fed. Cir. 2002); Winner Int'l Royalty Corp. v. Ching-Rong Wang, 53 USPQ2d 1580, 1586-1587 (Fed. Cir. 2000).

In the present case, none of US '123 and US '640 provides any motivation or suggestion to arrive at the claimed label with cold glue adhesive. None of US '123 and US '640 provides any reason to replace a pressure-sensitive adhesive with a cold glue adhesive.

Also, cold glue adhesives and pressure-sensitive adhesives have different functional applications which necessitate that cold glue adhesives and pressure-sensitive adhesives have different formulations and inherent properties. Therefore, a person of ordinary skill in the art would never have modified US '123 by replacing the pressure-sensitive adhesives of US '123 with cold glue adhesives.

At page 2 of the Advisory Action mailed April 26, 2005, the Examiner asserts that the Declaration filed November 22, 2004, "provides opinion evidence and is found to have little value because of a lack of any factual support."

Applicants respectfully disagree with the position taken by the Examiner regarding the Declaration filed November 22, 2004. Opinion testimony is entitled to consideration and some weight, so long as the opinion is not on the ultimate legal conclusion at issue. In re Chilowsky, 306 F.2d 908, 134 USPQ 515 (CCPA 1962).

The Declaration filed November 22, 2004, contains Ms. Squier's testimony on, *inter alia*, the differences between the terms "cold glue adhesive" and "pressure-sensitive adhesive." Because Ms. Squier's testimony is not on the ultimate legal conclusion at issue, it is entitled to consideration and some weight. In particular, Applicants submit that sufficient weight should be attached to Ms. Squier's Declaration to lead to the conclusion that the term "cold glue adhesive" in the present claims does not encompass the pressure-sensitive adhesives disclosed in US '123.

In order to advance the prosecution, Applicants are submitting herewith an excerpt from *The Manual of Labelling Technology*.

The Manual provides the factual support asserted to be lacking by the Examiner in the Declaration filed November 22, 2004. Specifically, at pages 173 and 174 of the Manual, wet-glue adhesives are described. As is made clear by the second sentence of the first paragraph of Section 5.1 at page 173, wet-glue is synonymous with cold-glue. At pages 253-255 of the Manual, self-adhesives are described. As is made clear by the paragraph bridging pages 253 and 254 of Section 5.7, self-adhesives are synonymous with pressure-sensitive adhesives.

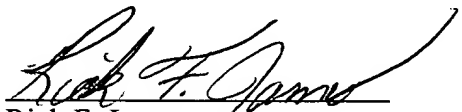
Most importantly, the excerpts from the Manual, in combination with Ms. Squier's testimony in the Declaration filed November 22, 2004, lead to the conclusion that the term "cold glue adhesive" is understood by those of ordinary skill in the art as referring to a class of materials distinct from and not including "pressure-sensitive adhesives."

For the foregoing reasons, Applicants respectfully request that the Examiner reconsider and withdraw the remaining §102 and §103 rejections.

In light of the foregoing, the Declaration of Ms. Squier filed November 22, 2004, the excerpt from *The Manual of Labelling Technology* being submitted herewith, and the remarks/arguments presented in the Response filed April 8, 2005, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: June 2, 2005



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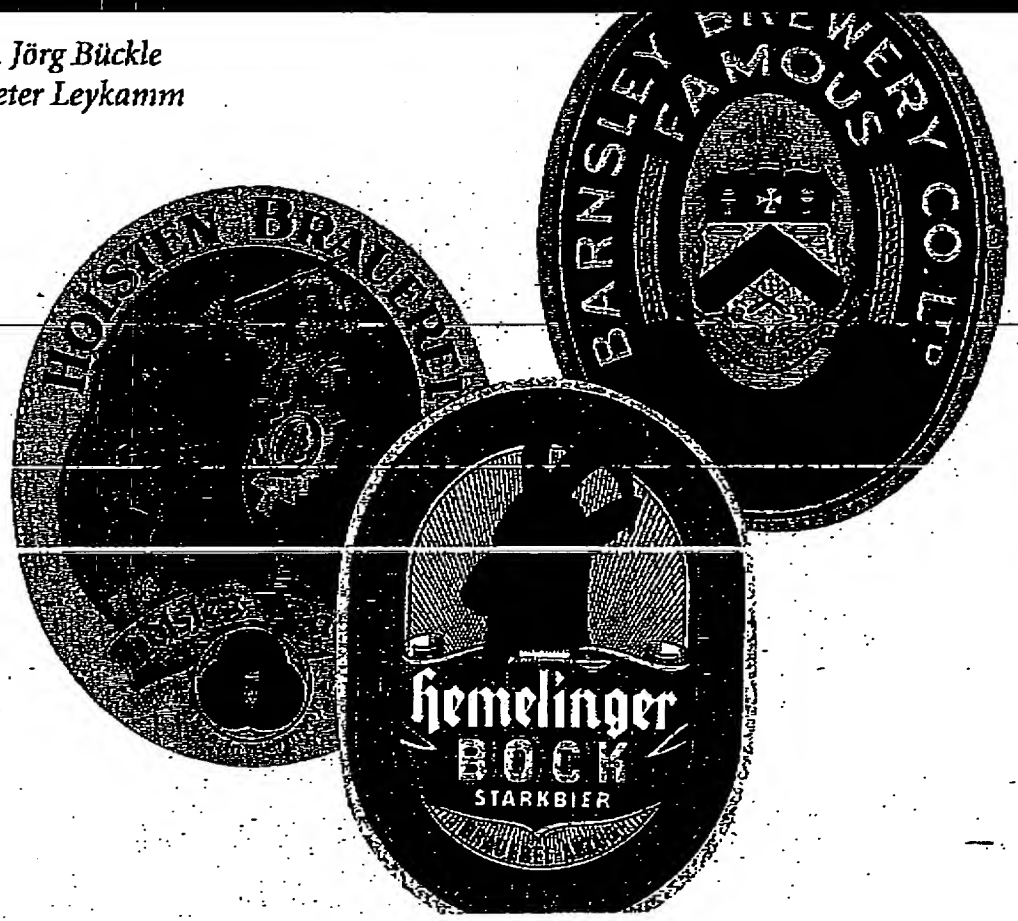
The Manual of Labelling Technology

Basics and Practice in Successful Product Dressing

Dr. Jörg Bückle
Dieter Leykamm



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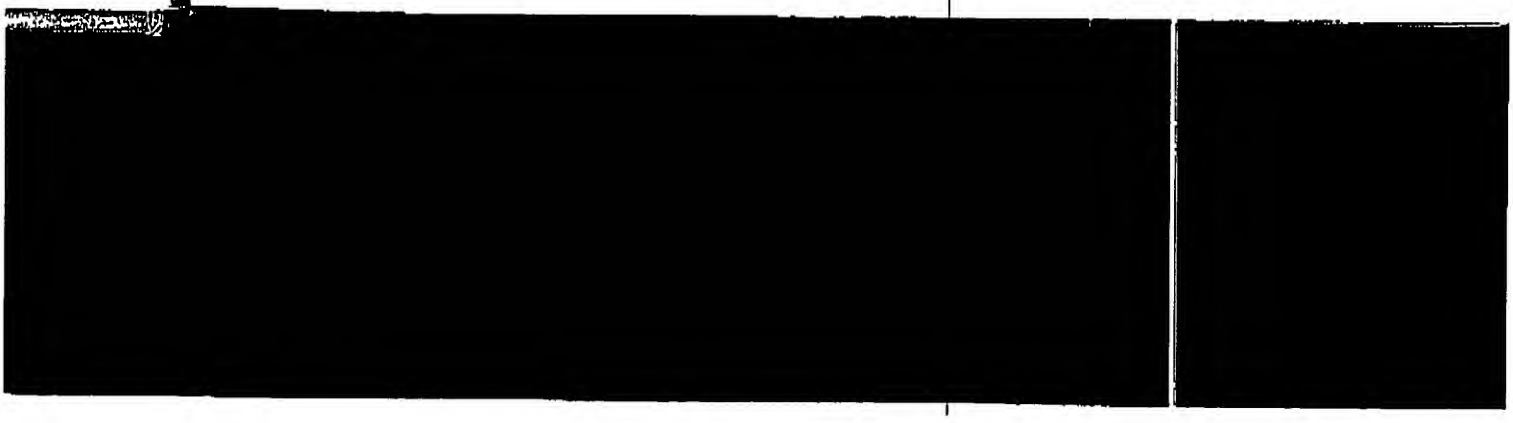

Imprint

Publisher
Volker Kronseder

Project lead
Hans-Joachim Tetzlaff

Editorial support
Karl-Heinz Achhammer

Art direction
Roland Pokorny

Photographs
Hans-Joachim Tetzlaff
Bernhard Tonollo
(other photographs
see list, appendix)

Artwork
Birgit Standecker
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Translation
Anthony Hood
Bernadette Slater

We would like to thank the following people/companies for their cooperation:

The companies, who supported us by providing photographs, information as well as personal input for the respective topics (in alphabetical order): Allen Codiergeräte, Alltec, Brigl & Bergmeister, Domino, Haendler & Nattermann, Hueck Folien, Illochroma, ITW Autosleeve, Marconi, Pactiv Kobush Folien, Stora Enso, Töpfer Kulmbach.

The association for manufacturers of self-adhesive labels (Verband der Hersteller selbstklebender Etiketten e.V.) for their extensive material supply on the topic self-adhesive labelling.

Production
Satz & Repro Hueber,
Neutraubling

Lithography
kaltnermedia GmbH,
Bobingen

Printing and processing
Aumüller Druck KG,
Regensburg

Paper
BVS matt by Scheufelen,
Lenningen

6th edition 2001
Revised edition

Printed in Germany

Table of contents

Fundamental rethinks: everything's in flux

It's fifty years now since the company's founder, my father Hermann Kronseder, designed and built his first semi-automatic labeller. It was an intermittently operating machine, as was customary back then, and labelled no fewer than 1,500 bottles an hour. It's in labelling technology that Krones AG has its roots, that's what's made it grow. The know-how built up over the years, evolved from a continual dialogue with users, was codified very early on in the shape of a Krones manual for distribution to our customers. The first edition (which sold out very quickly, by the way), appeared in 1970 under the title "Modern Bottle Dress". Nowadays, of course, this connotes something rather different to all of us compared with 30 years ago.

The "Manual of Labelling Technology" – meanwhile the standard work for anyone professionally involved with the subject of labelling – has accordingly been updated several times. This copy you're reading is already the sixth, completely revamped edition. It illuminates the market's expectations in regard to perfect dress from every conceivable angle. Growing importance, for example, is being attached to a combination of wet and self-adhesive labelling in all speed ranges. Shrink-sleeve technology is meanwhile a permanent part of the repertoire. The significant increase in PET containers and other plastic packages demands fundamental rethinks. Intelligent labels may revolutionise companies' internal and external logistics. Machines are required to be even user-friendlier in design, providing shorter changeover, erection and make-ready times, as well as reduced service and maintenance costs: in short – nothing is constant, everything's in flux – and that goes for labelling technology as well.

Krones as a complete-system vendor accordingly sees its task increasingly in terms of advising its clients on sales-boosting bottle and con-

tainer dress. The new Manual of Labelling Technology is a vital part of the whole here. Labelling technology remains a core priority at Krones AG, even though meanwhile the capability portfolio has been significantly extended to include complete turnkey construction of production, bottling/canning and packaging plants.

If you find this book both interesting and useful, then we'll be more than gratified.

Yours sincerely,
Volker Kronseder
Chairman of the Board of Management of Krones AG

5.1 | Skilled Top-performer
Wet-glue labelling

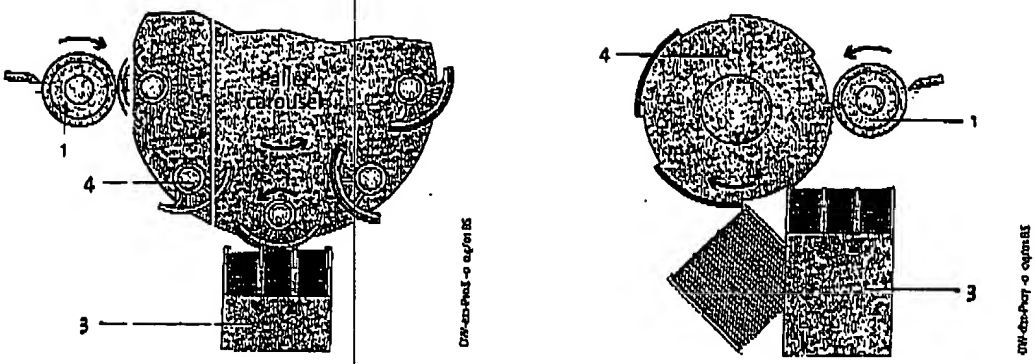
Wet-glue labelling technology comprises all labelling methods featuring water-soluble glues. Since these types of glue are processed at comparatively low temperatures, the term cold-glue technology is also used. The optimum processing temperature for casein-based glues, for example, is between 25° C and 32° C.

Wet-glue labelling technology continues to be the most inexpensive option for dressing containers. This is due firstly to the materials used to produce the label and adhesive, and secondly to the machine technology involved, which provides top efficiency levels right up into the ultra-high performance range. For example, machines with two stations will in practise reach an output of 120,000 labels per hour. Demonstration machines whose stations merely pick the labels up and deposit them in a container achieve as many as 160,000 labels an hour.

Wet-glue labelling technology continues to be the most inexpensive option for dressing containers

The main category of use for wet-glue labelling is the application of bottle dress to wet containers, e.g. in the beverage industry. In contrast to the application of self-adhesive labels, for example, it is not necessary to dry the containers prior to labelling. In special cases, however, dried bottles are also labelled by this process. This applies particularly in countries with a hot and humid climate. The high humidity poses a risk of the bottles drying too slowly, thereby causing mould to form whilst in the warehouse. This is why these bottles are subjected to a drying routine before the labelling function proper. A special mixed glue is used, which is precisely tailored to suit these conditions.

In the beverage industry, it is mainly glass containers that are dressed in cut-to-size or punched sheet labels, with paper being the predominant choice of material. There are different label types (body, shoulder, neck-around, seal, band, back, etc.), label formats (length, height) and label papers to choose from. Similar to paper labels, round or pointed neck



In terms of the principle involved, a distinction is made in wet-glue labelling between stations with a stationary label magazine and oscillating pallets (left) and those featuring a swivelling label magazine (right).

1 Glue roller
2 Gluing pallet
3 Label magazine
4 Gluing cylinder

foils as decorative bottle dress supplements, or bottle neck films for tamper-evident sealing are likewise processed with wet glue and permit a wide scope of imaginative creativity for the marketing experts. The limits in terms of format and label material are imposed only by the machine technology available.

Casein-based glue, whose basic constituent is obtained from milk protein, is the most widespread choice for processing paper labels onto glass. With returnable containers, the labels can easily be removed again in the bottle washer, thanks to the water-soluble wet glue. If, however, the label is not supposed to come off when exposed to water, as is the case with sparkling wine bottles in an icebucket, this can also be ensured by selecting a special wet glue.

The use of a special wet glue, however, also enables other containers to be dressed in paper or plastic labels made of OPP material (oriented polypropylene). Above and beyond this, research work is currently ongoing, tackling the option of also applying transparent films with wet glue, by using property-enhanced adhesives.

Both rotary and inline machine types are used for wet-glue labelling. The heart of each machine is the labelling station, which is available in a variety of configurations. How efficient the machine (and therefore the entire line is) depends closely on the reliability of the labelling stations. In terms of the principle involved, the following distinction is made in wet-glue labelling between two different types of labelling station: those with a stationary label magazine and oscillating pallets, and the system featuring a swivelling label magazine.

5.7 | Sticking in mind

Self-adhesive labelling

Self-adhesive labels enable dress concepts to be created with enthuse not only marketing experts, but also the customers. Who's not familiar with them, the bottles without a visible label, the information seemingly blended into the bottle's surface? And yet – it is indeed a label. Applied in the bottling hall, or in the glassworks, by a labeller.

Self-adhesive labels, however, are not only popular with the marketing experts, they also possess technical properties of major interest: their wet strength, for example, and the fact that no label-dependent handling parts are needed in the labelling station. Self-adhesive labels are hard-wearing, waterproof, and do not slip. Besides the conventional self-adhesive labels, self-adhesive labelling can also be used for applying transparent labels in the no-label look, wet-strength plastic labels or multi-page labels like a recipe booklet.

The structure of a self-adhesive label consists of three components. The actual printing stock, a transparent PP film in a no-label look, for example, is applied to a backing material made of siliconised PET or PP film by means of a special adhesive. The labeller then peels the label off the backing material, and glues it onto the container with the adhesive remaining on the label.

The self-adhesive label consists of three components

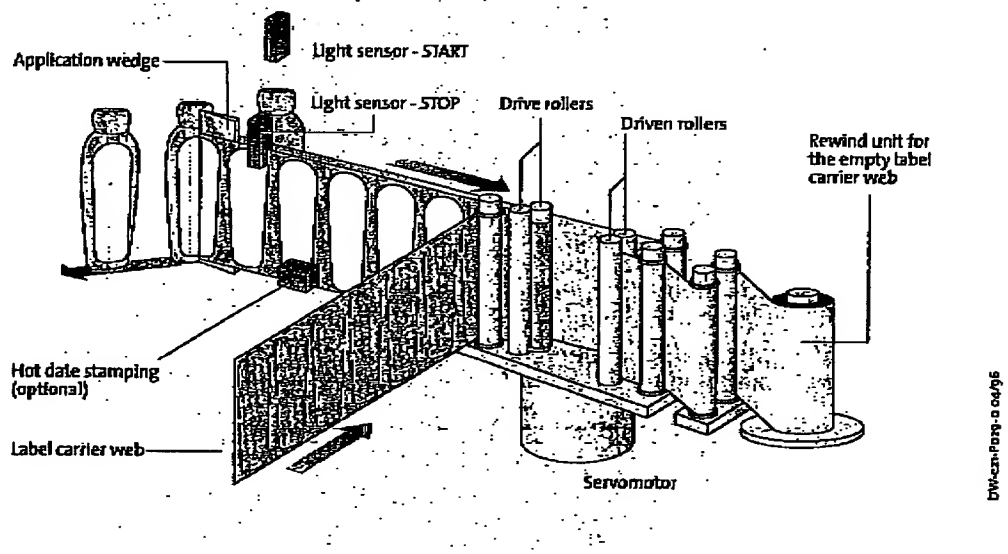
Only pressure-sensitive adhesives are used for self-adhesive labels. These are self-adhesive at room temperature, and remain so as well. Quite in contrast to a quick-setting adhesive, which of course hardens. Depending on the application involved, there are in turn many different adhesives with highly disparate properties to choose from. They include, for example, detachable, permanently adhering and numerous other kinds of specialty adhesive, which can, for instance, be dissolved in an alkaline milieu. When bottles labelled with the no-label look are

pasteurised, it is essential to use solvent-based adhesives. Emulsion adhesives turn white when heated, thus destroying the effect of the material's transparency.

Containers must be dry, free of dust, and exhibit a good surface quality

In turn, self-adhesive labels are used for all commonly encountered container or case materials, like glass, plastic, cardboard or metal. All container shapes can be handled, meaning round, oval, rectangular, polygonal, etc. It's essential that the containers arrive in the labeller absolutely dry and free of dust, at a temperature of not less than 16° C, and also exhibit a good surface quality. This applies most particularly to handling transparent labels, since any unevennesses in the container's surface will here result in visible air inclusions. These visual defects cause higher costs compared to wet-glue labelling. After all, if labelling is not

Besides the conventional self-adhesive labels, self-adhesive labelling can also be used for applying transparent labels in the no-label look.



In the label applicator the label is detached over the application wedge.

performed correctly, then not only is the label lost, but the container concerned also has to be rejected, since in most cases the label can no longer be removed.

The heart of a labeller for self-adhesive labels is the label applicator, which transports the carrier web with the self-adhesive labels to the container with the aid of a drive-driven roller mechanism. The label is detached over the application wedge using a photo-cell signal and transferred to the container. When the label has been completely peeled off, it is then accurately snug-fitted by special components at the container table.

The label position can be corrected either by an encoder and a digitally adjustable start time-delay or by an adjustable photo-cell. The label applicator is equipped with a low-wear servomotor, controlled to match the machine's speed. Since the entire control electronics have been integrated in the applicator, it constitutes an autonomous unit within the labeller.

The winding/unwinding device for the label carrier web is driven by the applicator's servomotor or by a separate motor. Reliability is enhanced by ultra-sonic scanning of labels and carrier web, plus a tear monitor.

No-label look
Labelling of packaging containers with maximally transparent materials, thus creating an impression of direct printing.

Offset printing
Planographic printing process, in which printing is performed indirectly from the printing plate via a blanket onto the printing stock.

OPP
Oriented polypropylene (label material); these special plastic films are given defined material properties by a finishing step.

OPS
Oriented polystyrene (label material); these special plastic films are given defined material properties by a finishing step.

Optical sensor
This sensor generates a 2x5-mm light beam and detects a cutting register mark on a label, i.e. the borderline or contrast between a light and a dark zone (CONTIROLL cutting registration control).

Oscillating gluing pallets
These gluing pallets use a sequence of movements generated by a special gear unit to transfer the label from the magazine to the transfer cylinder.

Peeling resistance
Is determined by measuring the force required for removing a self-adhesive material from the surface of a standard test plate under defined test conditions (e.g. pull-off angle and pull-off speed).

Pressure-sensitive adhesive
Contact adhesive which in its dry state at room temperature adheres to a multitude of surfaces after being lightly pressed against them.

PS
Polystyrene (label material).

PU-foamed
The backing material is covered with a layer of foamed polyurethane.

PVC
Polyvinyl chloride (label material).

Reel-fed labelling
Labelling with foil/film labels from the reel.

Reverse printing
Laterally reversed printing process for label material, i.e. the label material is printed on the reverse, and the imprinted ink shines through the transparent film label.

Rotating blade
The rotating blade is a kind of transfer cylinder with integrated blades, used to cut labels from the reel. The cylinder features several rows of small vacuum bores, which hold the label in the correct position during transfer to the gripper cylinder.

Self-adhesive labelling
Labelling with self-adhesive labels from a reel

Shear resistance (of an adhesive compound)
An adhesive's cohesion-based inner bond, often expressed in terms of the force required to divide or split the material involved.

Sheet labelling
Labelling with precut paper or foil/film labels

Shrinking carousel
When labelling with film labels, the label applied as a cylinder is shrunk onto the container in the shrinking carousel.

Shrink tunnel
The shrink tunnel serves for shrinking on tamper-evident neck sleeves, shrinkable wrap-around labels and normal sleeves.

Sleeve
Sleeve-shaped label made of plastic film.